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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,199	12/11/2001	Heather N. Bean	100110043-1	4347

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EXAMINER
HANNETT, JAMES M

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/016,199	BEAN ET AL.
Office Action Summary	Examiner	Art Unit	
	James M. Hannett	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

The following title is suggested: Power management device for starting up a digital

camera after a battery failure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

1: Claims 1-3, 5, 7, 11-14, 16, 21, 22, 24, 26, 30-34, 36, 38, 42 and 43 are rejected under 35

U.S.C. 102(b) as being anticipated by USPN 5,790,878 Anderson.

2: As for Claim 1, Claim 1 is rejected for reasons discussed related to Claim 21, since claim

21 is substantively equivalent to Claim 1.

3: In regards to Claim 2, Anderson teaches on Column 6, Lines 41-64 performing a

shutdown sequence prior to disabling further operation of the device, when the status of the

battery is unfavorable. The examiner views powering down a device until the power

management system detects that the battery voltage is above a threshold as disabling a device.

4: As for Claim 3, Claim 3 is rejected for reasons discussed related to Claim 22, since claim

22 is substantively equivalent to Claim 3.

5:      As for Claim 5, Claim 5 is rejected for reasons discussed related to Claim 24, since claim

24 is substantively equivalent to Claim 5.

6:      As for Claim 7, Anderson teaches on Column 6, Lines 41-64 and Column 7, Lines 31-41

the disabling further operation of the camera comprises setting a disable bit (power failure bit).

7:      As for Claim 11, Claim 11 is rejected for reasons discussed related to Claim 30, since

claim 30 is substantively equivalent to Claim 11.

8:      In regards to Claim 12, Claim 12 is rejected for reasons discussed related to Claim 31,

since claim 31 is substantively equivalent to Claim 12.

9:      As for Claim 13, Anderson depicts in Figure 1 and 3 and teaches on Column 6, Lines 41-

64, Column 7, Lines 58-67 and Column 8, Lines 1-33 a method for managing the operation of a

battery (358) powered device (camera) (118 and 114) in response to a power-on request, the

device includes a shutdown bit (power status indicator read by the computer) and a disable bit

(PFAIL Bit). The examiner views the process of powering up the camera and detecting if a

power failure had occurred as the process of testing a shutdown bit and a disable bit. (b) starting

up the device and setting the shutdown bit, when the shutdown and disable bits are both clear;

This is viewed by the examiner as turning on the camera when no power failure occurred. (c)

performing the following steps (i)-(iii), when the camera is turned on after no power failure had

occurred.(i) ascertaining a status of the battery; This is viewed by the examiner as checking the

voltage level of the battery to determine if the voltage level is below a threshold value. (ii)

performing a shutdown sequence, clearing the shutdown bit (turn off the power), and setting the

disable bit (set PFAIL Bit), when the status of the battery is unfavorable Column 7, Lines 31-41;

(iii) starting up the device and ensuring the integrity of a file system (DRAM) in the device,

when the status of the battery is favorable; Anderson teaches that the system indicates to the

image file system if a power failure had occurred so that the camera can correctly recover from

the power failure. Anderson teaches performing the following steps (i)-(iii), when the shutdown

bit is cleared (Power to the camera turned is OFF) and the disable bit is set (PFAIL Bit); This is

viewed by the examiner as the process of turning off the power to the camera and setting the

(PFAIL Bit) when the Voltage detector (359) senses that the voltage level of the battery (358)

has dropped below an acceptable level. Anderson teaches ascertaining a status of the battery

(checking the voltage level of the battery with sensor (359); starting up the device, ensuring file

system integrity, clearing the disable bit, and setting the shutdown bit, when the status of the

battery is favorable; This is viewed by the examiner as the process of turning on the power to the

camera when the battery has been replaced and the camera system detects that the (PFAIL bit)

has been set indicating that the system is being restarted from a power failure. Anderson further

teaches only allowing the camera to be power-up when the voltage detector (359) detects that the

voltage level of the battery is above a threshold. This is viewed by the examiner as preventing

operation of the device, when the status of the battery is unfavorable.

10:     In regards to Claim 14, Anderson teaches on Column 6, Lines 40-51 the circuit to

determine a status of the battery (342) is configured to measure the voltage (voltage sensor

(359)) of the battery (358).

11:     In regards to Claim 16, Anderson depicts in Figure 1 and 3 the device comprises a digital

camera.

12:     As for Claim 21, Anderson depicts in Figure 1 and 3 a device, comprising: a battery

(358); a circuit to determine a status of the battery (359); a file system (DRAM and 354); and

control logic configured to perform a shutdown sequence and prevent further operation of the

device, when the status of the battery is unfavorable (Column 6, lines 41-64), and to ensure the

integrity of the file system (prevent the loss of data) and startup the device, when the status of the

battery is favorable (Column 7, Lines 58-67 and Column 8, Lines 1-33).

13:     In regards to Claim 22, Anderson teaches on Column 6, Lines 40-51 the circuit to

determine a status of the battery (342) is configured to measure the voltage (voltage sensor

(359)) of the battery (358).

14:     In regards to Claim 24, Anderson depicts in Figure 1 and 3 the device comprises a digital

camera.

15:     In regards to Claim 26, Anderson teaches on Column 2, Lines 19-30 and depicts in

Figure 5 the file system comprises a file allocation table (data table in DRAM memory including

image data) having at least one entry, the file system being configured to allow the loss of at

most one entry (Anderson teaches no entries are lost) when battery fails.

16:     In regards to Claim 30, Anderson teaches on Column 6, lines 41-64, Column 7, Lines 58-

67 and Column 8, Lines 1-33 the control logic comprises a shutdown bit to detect when the

device has experienced a battery failure.

17:     As for Claim 31, Anderson teaches on Column 6, lines 41-64, Column 7, Lines 58-67 and

Column 8, Lines 1-33 the control logic comprises a disable bit (PFAIL BIT) to prevent the

device from being operated when the status of the battery is unfavorable.

18:     In regards to Claims 32 and 33, Claims 32 and 33 are rejected for reasons discussed

related to Claim 21, since claim 21 is substantively equivalent to the combination of Claims 32

and 33.

19:     In regards to Claim 34, Claim 34 is rejected for reasons discussed related to Claim 22,

since claim 22 is substantively equivalent to Claim 34.

20:     In regards to Claim 36, Claim 36 is rejected for reasons discussed related to Claim 24,

since claim 24 is substantively equivalent to Claim 36.

21:     In regards to Claim 38, Claim 38 is rejected for reasons discussed related to Claim 26,

since claim 26 is substantively equivalent to Claim 38.

22:     In regards to Claim 42, Claim 42 is rejected for reasons discussed related to Claim 30,

since claim 30 is substantively equivalent to Claim 42.

23:     As for Claim 43, Claim 43 is rejected for reasons discussed related to Claim 31, since

claim 31 is substantively equivalent to Claim 43.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

24:   Claims 6, 8-10, 17-20, 25, 27-29, 37, and 39-41 are rejected under 35 U.S.C. 103(a) as

being unpatentable over USPN 5,790,878 Anderson.

25:     In regards to Claim 6, Claim 6 is rejected for reasons discussed related to Claim 25, since

claim 25 is substantively equivalent to Claim 6.

26:     In regards to Claim 8, Claim 8 is rejected for reasons discussed related to Claim 27, since

claim 27 is substantively equivalent to Claim 8.

27:     As for Claim 9, Claim 9 is rejected for reasons discussed related to Claim 28, since claim

28 is substantively equivalent to Claim 9.

28:     In regards to Claim 10, Claim 10 is rejected for reasons discussed related to Claim 29,

since claim 29 is substantively equivalent to Claim 10.

29:     As for Claim 17, Anderson teaches the use of a camera system that automatically turns

off the power to a digital camera when the battery voltage drops below a set value. However,

Anderson does not teach that the lens on the digital camera is retracted during the shutdown

sequence.

Official Notice is taken that it was well known in the art at the time the invention was

made to retract the lens of a camera upon shutdown in order to prevent the lens from being

damages when the camera is stored.

. Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to retract the lens of a camera in Anderson upon shutdown in order to

prevent the lens from being damages when the camera is stored.

30:     In regards to Claim 18, Anderson teaches that the image memory gets erased when power

is not supplied to it. Furthermore, Anderson is configured to detect if a power failure has

occurred and notifies the camera system when a power failure occurs. However, Anderson does

not teach the method of displaying an error message to a user informing the user that an image

file has been corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was made to allow computerized file systems to notify users when a file was corrupted by a sudden power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computerized file system in Anderson to notify the camera user when a file was corrupted by a sudden power failure in order to inform the user that un-saved work was lost.

31:     As for Claim 19, Anderson teaches that the image memory gets erased when power is not supplied to it. Furthermore, Anderson is configured to detect if a power failure has occurred and notifies the camera system when a power failure occurs. However, Anderson does not teach the method of displaying an error message to a user informing the user that an image file has been corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was made to allow computerized file systems to notify users when a file was corrupted by a sudden power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computerized file system in Anderson to notify the camera user when a file was corrupted by a sudden power failure in order to inform the user that un-saved work was lost.

32:     In regards to Claim 20, Anderson teaches in Figure 5 and Column 5, Lines 59-67 that the DRAM memory stores RAW image data.

33:     As for Claim 25, Anderson teaches the use of a camera system that automatically turns off the power to a digital camera when the battery voltage drops below a set value. However, Anderson does not teach that the lens on the digital camera is retracted during the shutdown sequence.

Official Notice is taken that it was well known in the art at the time the invention was made to retract the lens of a camera upon shutdown in order to prevent the lens from being damages when the camera is stored.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to retract the lens of a camera in Anderson upon shutdown in order to prevent the lens from being damages when the camera is stored.

34:     As for Claim 27 and 28, Anderson teaches that the image memory gets erased when power is not supplied to it. Furthermore, Anderson is configured to detect if a power failure has occurred and notifies the camera system when a power failure occurs. However, Anderson does not teach the method of displaying an error message to a user informing the user that an image file has been corrupted due to power failure.

Official notice is taken that it was well known in the art at the time the invention was made to allow computerized file systems to notify users when a file was corrupted by a sudden power failure and inform the user that un-saved work was lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the computerized file system in Anderson to notify the camera user when a file was corrupted by a sudden power failure in order to inform the user that un-saved work was lost.

35:     As for Claim 29, Anderson teaches in Figure 5 and Column 5, Lines 59-67 that the

DRAM memory stores RAW image data.

36:     As for Claim 37, Claim 37 is rejected for reasons discussed related to Claim 25, since

claim 25 is substantively equivalent to Claim 37.

37:     As for Claim 39, Claim 39 is rejected for reasons discussed related to Claim 27, since

claim 27 is substantively equivalent to Claim 39.

38:     In regards to Claim 40, Claim 40 is rejected for reasons discussed related to Claim 28,

since claim 28 is substantively equivalent to Claim 40.

39:     As for Claim 41, Claim 41 is rejected for reasons discussed related to Claim 29, since

claim 29 is substantively equivalent to Claim 41.

40:   Claims 4, 15, 23, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over

USPN 5,790,878 Anderson in view of USPN 6,327,001 Yamagishi.

41:     In regards to Claim 4, Claim 4 is rejected for reasons discussed related to Claim 23, since

claim 23 is substantively equivalent to Claim 4.

42:     As for Claim 15, Anderson teaches a system which automatically shuts down the power

to a camera if the battery voltage has dropped below a certain threshold. However, Anderson

does not teach that the power management system (342) can detect an insertion of a battery.

        Yamagishi teaches on Column 3, Lines 55-61 and Column 21, Lines 1-5 that it is

advantageous when designing a power management system for a digital camera in which the

power to the camera is turned off if the voltage level of the battery has dropped below a set

threshold, to allow the camera to detect the battery type and detect the act of inserting a battery

in order to better manage the power system of the camera.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to allow the camera of Anderson et al to detect both the battery type and

detect the act of inserting a new battery as taught by Yamagishi in the power management

system of Anderson et al in order to better manage the power system of the camera.

43:     As for Claim 23, Anderson teaches a system which automatically shuts down the power

to a camera if the battery voltage has dropped below a certain threshold. However, Anderson

does not teach that the power management system (342) can detect an insertion of a battery.

Yamagishi teaches on Column 3, Lines 55-61 and Column 21, Lines 1-5 that it is

advantageous when designing a power management system for a digital camera in which the

power to the camera is turned off if the voltage level of the battery has dropped below a set

threshold, to allow the camera to detect the battery type and detect the act of inserting a battery

in order to better manage the power system of the camera.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to allow the camera of Anderson et al to detect both the battery type and

detect the act of inserting a new battery as taught by Yamagishi in the power management

system of Anderson et al in order to better manage the power system of the camera.

44:     As for Claim 35, Claim 35 is rejected for reasons discussed related to Claim 23, since

claim 23 is substantively equivalent to Claim 35.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. US 2002/0018137 Tsuda teaches the use of a camera with a power management

system; USPN 6,710,809 Niikawa teaches the use of a battery powered camera that detects the

voltage of the battery and turns off the camera when the battery voltage drops below a set

threshold; US 2002/0154243 Fife et al teaches the use of a power management system in a

digital camera; USPN 5,359,728 Rusnack et al teaches the use of a method for ensuring data

integrity in a file system upon a power failure; USPN 6,263,453 Anderson teaches the use of a

camera that prevents damage to media files within a digital camera device; USPN 5,963,255

Anderson teaches the use of a camera that prevents damage to media files within a digital camera
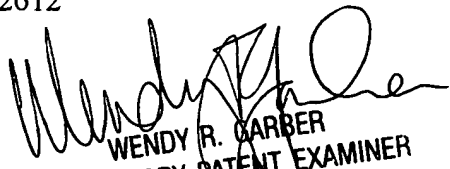
device.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James M. Hannett whose telephone number is 571-272-7309.

The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH

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